Natural Resource Stewardship and Science Biological Resource Division



## White-Nose Syndrome of Bats

The National Park Service (NPS) preserves, protects, and shares the legacies of treasured resources set aside by the American people as the national park system. In meeting this mission, the NPS exercises its mandate for wildlife management in NPS units. White-nose syndrome (WNS) is threatening bat conservation as well as visitor use of some recreational caves and enjoyment of bats in NPS units.

### What is at risk from WNS?

NPS manages 84 million acres in more than 400 units. Nearly 1 in 4 NPS units have caves, and 1 in 3 contain mines that can provide habitat for bats and other organisms.

Nationwide about 50 species of bats occur in NPS units, including 7 species that are Federally listed as threatened or endangered, and numerous other species that are State listed. Bats have important ecosystem functions including roles as insect-eaters, pollinators, and seed dispersers, as well as serving as prey themselves.

In states where WNS has been detected to date, NPS units are home to

numerous species of insect-eating bats, including 4 species that are endangered.

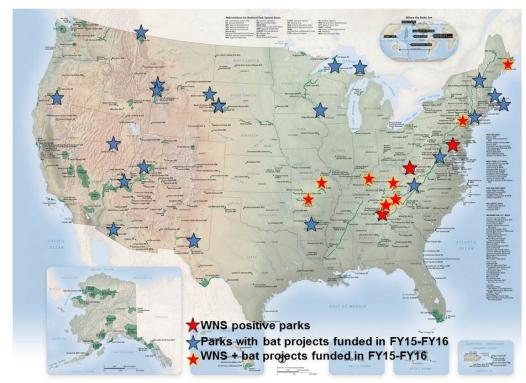
NPS units in 28 states are affected by WNS. Since it was first detected in 2007, millions of bats have died, including 99% of some hibernacula. Losing an important predator so quickly may have far-reaching consequences. As the disease spreads, the impact and potential for impact on national parks is considered very high.

NPS units welcome more than 270 million visitors per year. Caves are the primary attraction at some national parks, such as Mammoth Cave and

Carlsbad Caverns, and wild caves are a secondary attraction at numerous NPS units. Preserving these caves and the natural resources within them is a priority for the NPS.

## **How is NPS addressing WNS?**

- Parks with cave resources are updating their Cave Management Plans or using other means to identify and implement actions that minimize the risk of *P. destructans* spreading *into* uninfected parks and *from* infected parks. These actions include providing extensive WNS education materials; screening visitors and gear; disinfection; and, when necessary, closure of cave resources.
- Access to all NPS caves is restricted to those who hold appropriate permits or tour tickets. Show caves such as those located in Cumberland Gap National Historic Park, Jewel Cave National Monument, Mammoth Cave National Park, Timpanogos National Monument remain open with precautions in place.
- The NPS Abandoned Mineral Lands Program requires all inspectors, surveyors, and contractors to use new gear or to disinfect gear protocols prior to working in NPS mines.



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## White-Nose Syndrome of Bats, cont.

- NPS wildlife veterinarians are providing service-wide coordination on WNS surveillance and management, and partnering with other Federal and State agencies in national coordination efforts.
- Since 2013, researchers in parks have undertaken projects to learn more about WNS and bats in national parks. More than 153 projects in 78 parks have received funding to study WNS. Some of the accomplishments include studies of park-specific bat species distributions and habitat use. Other projects focus on protecting bats, either through visitor screening and decontamination or installing bat gates or cupolas on caves or abandoned mines. Some parks have also used the funding to produce educational programs and signs about the importance of bats and the threat of WNS.



#### **WNS and Human Health**

The NPS Office of Public Health has issued the following statement on WNS:

Current evidence indicates that WNS is not transmissible from bats to humans. Studies have shown that the fungus grows only at cold temperatures (41-68 degrees F) that are much lower than that of the human body. Also, no human infections have ever been documented after exposure to WNS-infected bats or caves.

Although WNS does not cause illness in humans, a small percentage of bats can be infected with other dangerous diseases such as rabies. Bats infected with either WNS or rabies may exhibit unusual behavior (e.g. erratic flying), which increases the risk for bat-human contact and exposure. Additionally, declines in bat populations can impact human health indirectly since humans depend on bats for important ecosystem services such as crop pollination and controlling pest insects.

# Parks/Regions/Networks That Received Funding for Research on White-Nose Syndrome, FY2015-2016

Acadia National Park Alaska Regional Office Blue Ridge Parkway Buffalo National River Cape Cod National Seashore Carlsbad Caverns National Park Chickamauga & Chattanooga National Mili-Cumberland Gap National Historical Park Delaware Water Gap National Recreation Devil's Tower National Monument Effigy Mounds National Monument Fire Island National Seashore Glacier National Park Glen Canyon National Recreation Area Grand Canyon National Park Grand Teton National Park Great Basin National Park Great Lakes I & M Network Great Smoky Mountains National Park Hot Springs National Park Jewel Cave National Monument Keweenaw National Historical Park Lava Beds National Monument Mammoth Cave National Park Marsh-Billings-Rockefeller National Historical Park National Capital Parks—East Northern Great Plains I & M Network Organ Pipe Cactus National Monument Ozark National Scenic Riverways Pictured Rocks National Lakeshore Shenandoah National Park Upper Columbia Basin I & M Network Wind Cave National Park Yellowstone National Park

#### **More Information**

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